

PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q81988

Akihiro SHIMADA

Appln. No.: 10/500,572

Group Art Unit: 2834

Confirmation No.: 5252

Examiner: Hanh N. NGUYEN

Filed: July 1, 2004

For: MAGNETIC BEARING DEVICE

REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits this Reply Brief in response to the Examiner's Answer dated March 10, 2008. Entry of this Reply Brief is respectfully requested.

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REPLY BRIEF
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STATUS OF CLAIMS

Claims 1-5 are all the claims pending in the present application. Claims 3-5 are allowed.

Claims 1 and 2 have been finally rejected, and are the subject of this appeal.

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GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claim 1 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Traxler et al. (U.S. Patent No. 5,720,160) in view of Muszynski (U.S. Patent No. 5,814,908).
2. Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Traxler et al. in view of Muszynski and further in view of Millman (U.S. Patent No. 3,690,317).

ARGUMENT

In the *Response to Argument* section of the Examiner's Answer, the Examiner responds to Appellant's arguments set forth in the Appeal Brief dated December 31, 2007. In response, Appellant maintains that the present invention, as claimed, is patentable over the applied references at least based on the previously submitted arguments and the arguments set forth below.

A. Traxler and Muszynski do not render claim 1 unpatentable under 35 U.S.C. § 103(a).

With respect to claim 1, Appellant previously argued that the applied references do not disclose or suggest at least, "cooling wind producing means for producing cooling wind of a low temperature with using a driving force of said rotary member," as recited in claim 1. The Examiner acknowledges that the primary reference of Traxler does not disclose the above-quoted feature, however the Examiner believes that Muszynski discloses this feature. *See pages 8-9 of Appeal Brief dated December 31, 2008.* In response to the arguments in the Appeal Brief, the Examiner alleges:

The Examiner respectfully disagrees with the Appellant. The apparatus of Muszynski is not an entirely separate mechanism for providing ventilating air into a housing of another machine. The machine of Muszynski using the driving force of its rotary member (rotor hub) to cool the inside of the machine by mounting fan blades or fins to its rotary member (Figures 1-3 of Muszynski). Even [though] the cooling wind producing means (including fan blades or fins) does not constitutes the magnetic bearing apparatus, it is obvious to use the cooling means of Muszynski in Traxler et al. because the Examiner does not try to incorporate two different machines into one new machine. The Examiner only uses the teaching of Muszynski to mount the cooling means (fan blades or fins) to the rotary member of magnetic bearing apparatus to produce wind. (emphasis added)

Appellants note that the Examiner appears to acknowledge that the cooling wind producing means of Muszynski does not constitute the magnetic bearing apparatus. Further, the Examiner appears to acknowledge that Muszynski is directed to a separate apparatus for providing ventilating air into a housing of a separate and different electric machine. Although Muszynski does discuss a rotary member, said rotary member of Muszynski does not constitute a magnetic bearing apparatus, as the apparatus of Muszynski is an entirely separate mechanism for providing ventilating air into a housing of another machine. Combining Muszynski with Traxler would simply produce a magnetic bearing apparatus with a separate apparatus for providing ventilation to said magnetic bearing apparatus. Therefore, clearly the production of cooling wind would not be based on the driving force of a rotary member that constitutes a magnetic bearing apparatus (but, instead would be based on the rotary member of a separate apparatus). Therefore, as Appellants have maintained all along, what is missing in the art is any teaching of a self-cooled magnetic bearing. The lack of this fundamental teaching, in Appellant's view, dooms any effort by the Examiner to cobble together the invention from parts of diverse apparatuses.

Further Appellants maintain that although Muszynski does discuss a rotary member, there is no teaching or suggestion that said rotary member of Muszynski constitutes a magnetic bearing apparatus.

Yet further, Appellant maintains that the present invention, as recited in claim 1, can achieve, for example, a functionality beyond what is in the prior art, e.g., a self-cooling magnetic bearing apparatus.

At least based on the foregoing, Appellant maintains that independent claim 1 is patentably distinguishable over the applied references, either alone or in combination.

A. **Traxler, Muszynski and Millman do not render claim 2 unpatentable under 35 U.S.C. § 103(a).**

Appellant maintains that claim 2 is patentable at least by virtue of its dependency from independent claim 1. Millman does not make up for the deficiencies of the other applied references.

Further, Appellant previously argued that one of ordinary skill in the art would not have been led to combine Millman with either Traxler or Muszynski at least because Millman is directed to a totally different technology area than that of the other applied references. *See pages 9-10 of December 31st Appeal Brief.* In response to the previously submitted arguments, the Examiner alleges:

The Examiner respectfully disagrees with the Appellant because it has been held that a prior art reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the prior art reference (Millman) is reasonably pertinent to the particular problem with which the applicant was concerned because the control valve to control the flow speed of the wind is important in process of producing cooling winds. Moreover, the control valve of the present invention and the control valve of the prior art reference are all deal with fluid dynamic mechanics.

In response, Appellant submits that it appears that the Examiner misconstrues Appellant's argument that one of ordinary skill in the art would not have been motivated to combine Millman

with either Traxler or Muszynski, as the Examiner's response is simply to allege that Millman is reasonably pertinent to the particular problem with which the Applicant was concerned.

First, Appellant submits that the claimed invention is not concerned with a sonic nebulizer for producing mechanical vibrations which are transmitted through a coupling fluid and focused on a second fluid (see Millman). The claimed invention is directed to, for example, a magnetic bearing apparatus comprising, among other things, cooling wind producing means for producing cooling wind of a low temperature using the driving force of rotary member and a cooling wind flow path through which the low temperature cooling wind produced by the cooling wind producing means is to flow into the magnetic bearing apparatus. Simply because Millman involves fluid dynamics, does not render it reasonably pertinent to a problem that the Appellant was concerned with. One concern of the Appellant's invention is the heat that is generated by ultra high speed rotation of a magnetic bearing apparatus. In other words, one concern of the claimed apparatus invention is bearing overheating. Differently, the concern of Millman is that prior art nebulizers preclude accurate control of the quantity of medicament nebulized over a given period of time so that a specified medicament-air and/or oxygen mixture can be maintained to a patient over a short or long time period. Clearly, the concerns of Millman are different from those of the claimed invention.

Further, Appellants submit that the specific argument that was previously presented was that one of ordinary skill in the art would not have been motivated to combine Millman with the other applied references. The Examiner does not address this specific argument, and simply attempts to assert that Millman is reasonably pertinent to a particular problem of the claimed

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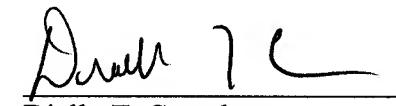
invention. Thus, Appellant submits 1) that Millman is NOT reasonably pertinent to the particular problem of Appellants invention, 2) the Examiner has NOT addressed the argument that one of ordinary skill in the art would not have been motivated to combine Millman with the other applied references, and 3) none of the applied references discloses or suggests combining Millman with the other applied references.

At least based on the foregoing, Appellant submits that claim 2 is patentably distinguishable over the applied references, either alone or in combination.

CONCLUSION

For the above reasons as well as the reasons set forth in Appeal Brief, Appellant respectfully requests that the Board reverse the Examiner's rejections of claims 1 and 2 on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



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